

What is claimed is;

1. A flash apparatus, comprising:

a light emission unit that emits light with an electric charge stored at a main capacitor;

5 a battery chamber in which an internal battery constituting a source battery is loaded;

a mounting unit at which an auxiliary battery apparatus having loaded therein an external battery to be connected in series with the internal battery is detachably mounted; and

10 a detector that detects whether the auxiliary battery apparatus is mounted.

2. A flash apparatus according to claim 1, further comprising:

15 a battery check circuit that detects a charge speed at which the main capacitor is charged and generates one of an output corresponding to remaining battery power available in the internal battery and an output corresponding to remaining battery power available in the internal battery and the  
20 external battery based upon the charge speed and results of a detection executed by the detector.

3. A flash apparatus according to claim 2, wherein:

the battery check circuit generates the output  
25 corresponding to the remaining battery power by comparing the

charge speed having been detected with a threshold value for battery check.

4. A flash apparatus according to claim 3, wherein:

5 the threshold value is set higher if the detector detects that the auxiliary battery apparatus is mounted than the threshold value set when the detector does not detect that the auxiliary battery apparatus is mounted.

10 5. A flash system with an auxiliary battery, comprising:  
a flash apparatus according to any of claims 1 through 4; and

an auxiliary battery apparatus according to any of claims 1 through 4, wherein:

15 the internal battery and the external battery are each a cylindrical battery;

an internal battery space where a plurality of cylindrical batteries are loaded side-by-side in a row is provided at the battery chamber; and

20 an external battery space where a single cylindrical battery constituting the external battery is loaded so as to allow an axial center of the external battery to extend along a direction of the row in which the plurality of cylindrical batteries are arranged is formed at the auxiliary battery  
25 apparatus.

6. An auxiliary battery apparatus detachably mounted at an electric apparatus, comprising:

a battery loading unit having an external battery loaded  
5 therein, that is detachably mounted at the electric apparatus  
in place of a lid of a battery chamber of the electric apparatus;

an electric connection member that connects an internal  
battery loaded in the battery loading unit to an external  
battery loaded in the battery chamber of the electric apparatus  
10 when the battery loading unit is mounted; and

a lid mounting unit provided at the battery loading unit,  
at which the lid is attached, wherein:

when the lid is attached to the lid mounting unit, the  
battery in the battery loading unit becomes concealed.

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7. A flash apparatus according to claim 6, further  
comprising:

a lock mechanism that disallows removal of the battery  
loading unit from the electric apparatus by interlocking with  
20 attachment of the lid to the battery loading unit and allows  
the battery loading unit to be disengaged by interlocking with  
detachment of the lid.

8. An auxiliary battery apparatus according to claim 6,  
25 wherein:

the battery loading unit includes a battery support bed that supports the battery and is detachably mounted at the electric apparatus; and a battery cover that is positioned and set so as to enclose the battery supported by the battery support bed, wherein:

as the battery cover is positioned and set at the battery support bed and the lid is attached at the battery cover, the battery support bed and the battery cover come to constitute an integrated unit via the lid, and the battery support bed and the battery cover cease to constitute the integrated unit when the lid is disengaged.

9. An auxiliary battery apparatus according to claim 7, wherein:

the battery loading unit includes a battery support bed that supports the battery and is detachably mounted at the electric apparatus; and

a battery cover that is positioned and set so as to enclose the battery supported by the battery support bed, wherein:

as the battery cover is positioned and set at the battery support bed and the lid is attached at the battery cover, the battery support bed and the battery cover come to constitute an integrated unit via the lid, and the battery support bed and the battery cover cease to constitute the integrated unit when the lid is disengaged.

10. An auxiliary battery apparatus according to any of claims 6 through 9, wherein:

the electric apparatus is a flash apparatus for a camera.

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11. An electric system with an auxiliary battery, comprising:

an electric apparatus according to any of claims 6 through 9; and

10 an auxiliary battery apparatus according to any of claims 6 through 9, wherein:

the internal battery and the external battery are each a cylindrical battery;

an internal battery space where a plurality of  
15 cylindrical batteries are loaded side-by-side in a row is formed at the battery chamber; and

an external battery space where a single cylindrical battery constituting the external battery is loaded so as to allow an axial center of the external battery to extend along  
20 a direction of the row in which the plurality of cylindrical batteries are arranged is formed at the auxiliary battery apparatus.

12. An electric system with an auxiliary battery according  
25 to claim 11, wherein:

the electric apparatus is a flash apparatus for a camera.